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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,600	09/23/2005	Norbert Erhardt	66489-071-7	1969
25269	7590	06/01/2007		
DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005			EXAMINER MIDKIFF, ANASTASIA	
			ART UNIT 2882	PAPER NUMBER
			MAIL DATE 06/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,600	Applicant(s) ERHARDT ET AL.	
	Examiner Anastasia Midkiff	Art Unit 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,26-31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31,33 and 34 is/are allowed.
- 6) ☒ Claim(s) 22,26,27,30 and 35 is/are rejected.
- 7) ☒ Claim(s) 28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 26, 27, 30, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent to Zeller et al. (US 6,055,292).

With respect to Claim 22, Zeller et al. teach an x-ray system (Abstract) having an x-ray sensitive camera (4), comprising:

- a first image detector (18) for the creation of a first panoramic tomographic image (Column 2, Lines 43-46);
- a second image detector (18') in the form of a face sensor (Figure 3) disposed alongside said first image detector in a common casing (Figure 3) for creation of a 2D plane image (Column 2, Lines 43-46);
- means provided for the creation of 3D images of a subvolume of the mandibular arch (Column 5, Lines 1-2), which means creates several 2D images from different directions (Column 5, Lines 3-6), and compute a 3D image therefrom using cone beam technology of a CCD sensor operated in time delay integration with associated reconstruction algorithms (Column 5 Lines 66-67, and Column 6 Lines 1-37);

- wherein adjustment means (9) are provided for moving, as desired, said second image detector (18') into the optical path of an x-ray emitter (3, Figure 2) for the creation of the respective x-ray image (Column 2 Lines 43-46, and Column 5 Lines 23-41).

With respect to Claim 26, Zeller et al. further teach adjustment means (1) by means of which said camera and an x-ray emitter can be adjusted such that a center of rotation lies in the subvolume to be imaged, said camera and emitter moveable as a unit (Figures 2 and 7).

With respect to Claim 27, Zeller et al. further teach that said adjustments means (9) are disposed in said casing (40) of said camera (Figures 1, 5, and 8).

With respect to Claim 30, Zeller et al. further teach that said camera is mounted for eccentric displacement (Figures 2 and 7) and, in a first position, said image detector (18) is positioned in an x-ray fan beam for the creation of a panoramic tomographic image (Column 2, Lines 43-46), and, in a second position, said image detector (18') is positioned in the x-ray fan beam for the creation of a 3D image (Column 5, Lines 1-15).

With respect to Claim 35, Zeller et al. teach an x-ray sensitive camera (Abstract and Title) comprising:

- a first image detector (18) for the creation of a first panoramic tomographic image (Column 2, Lines 43-46);
- a second image detector (18') in the form of a face sensor (Figure 3) disposed alongside said first image detector in a common casing (Figure 3) for creation of 2D plane images (Column 2, Lines 43-46);

- wherein adjustment means (9) are provided for moving, as desired, said second image detector (18') into the optical path of an x-ray emitter (3, Figure 2) for the creation of the respective x-ray image (Column 2 Lines 43-46, and Column 5 Lines 23-41);
- wherein said camera (4) has a radiolucent region disposed alongside said first image detector (18) and said second image detector (18'), where x-rays enter said camera (Column 2, Lines 55-60).

Allowable Subject Matter

Claims 31 and 33-34 are allowed.

Claims 28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of examiner's reasons for indicating allowable subject matter:

With respect to Claim 28, the prior art of record teaches most of the elements of the claimed invention, including an x-ray system having an x-ray sensitive camera, comprising: a first image detector for the creation of a first panoramic tomographic image; a second image detector in the form of a face sensor disposed alongside said first image detector in a common casing for creation of a 2D plane image; means provided for the creation of 3D images of a subvolume of the mandibular arch, which means creates several 2D images from different directions and compute a 3D image

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therefrom using cone beam technology with associated reconstruction algorithms; wherein adjustment means are provided for moving, as desired, said second image detector into the optical path of an x-ray emitter for the creation of the respective x-ray image.

However, prior art fails to teach or fairly suggest the system wherein there is additionally an installation for the creation of teleradiographic images with another image detector so that when said x-ray emitter is aligned for the creation of a teleradiographic image, said camera is disposed in the region of the optical path between said emitter and said image detector of said installation for the creation of teleradiographic images and is radiolucent in said region of optical path, in the manner required by Claim 28.

With respect to Claim 29, the prior art of record teaches most of the elements of the claimed invention, including an x-ray system having an x-ray sensitive camera, comprising: a first image detector for the creation of a first panoramic tomographic image; a second image detector in the form of a face sensor disposed alongside said first image detector in a common casing for creation of a 2D plane image; means provided for the creation of 3D images of a subvolume of the mandibular arch, which means creates several 2D images from different directions and compute a 3D image therefrom using cone beam technology with associated reconstruction algorithms; wherein adjustment means are provided for moving, as desired, said second image detector into the optical path of an x-ray emitter for the creation of the respective x-ray image.

However, prior art fails to teach or fairly suggest the system wherein there is additionally an installation for the creation of teleradiographic images with another image detector so that when said x-ray emitter is aligned for the creation of a teleradiographic image, said camera is moved out of the optical path between said emitter and said image detector of said installation for the creation of teleradiographic images, in the manner required by Claim 29.

With respect to Claim 31, prior art teaches most of the elements of the claimed invention, including an x-ray system having an x-ray sensitive camera, comprising: a first image detector for the creation of a tomographic image; a second image detector disposed alongside said first image detector in a common casing for creation of a plane image; wherein adjustment means are provided for moving, as desired, said second image detector into the optical path of an x-ray emitter for the creation of the respective x-ray image.

However, prior art fails to teach or fairly suggest the system wherein said second image detector is disposed on a rear side of said first image detector, in the manner required by Claim 31.

Claims 33 and 34 are allowed by virtue of their dependency upon Claim 31.

Response to Arguments

Applicant's arguments, see Applicant Amendment, filed 05 March 2007, with respect to the previous prior art rejections of Claims 22, 26, 30, and 31 as being anticipated by Pfeiffer, and the rejections of Claims 31, 33, and 34 as being anticipated

by Zeller et al. have been fully considered and are persuasive. The previous prior art rejections of Claims 22, 26, 30, and 31 as being anticipated by Pfeiffer, and the rejections of Claims 31, 33, and 34 as being anticipated by Zeller et al. have been overcome by the amendment.

Applicant's arguments, see Applicant Amendment, filed 05 March 2007, with respect to the previous double patenting rejections over application No. 10/550304 have been fully considered and are persuasive. The previous double patenting rejections over application No. 10/550304 have been overcome by the amendment.

Applicant's arguments, filed 05 March 2007, with respect to the prior art rejections of Claims 22, 26, 27, 29-30, and 35 as being anticipated by Zeller et al. have been considered but are not persuasive.

With respect to Claims 22, 26, 27, 29-30, and 35, the Applicant asserts that Zeller et al. does not meet the limitations of the invention as claimed, because Zeller et al. does not teach a translucent zone in the sensor where x-rays pass the entire camera. The examiner respectfully disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the translucent zone in the sensor wherein x-rays pass the entire camera) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Only claim 35 requires a radiolucent region at all, which is described in Lines 10-14 of the claim as "said *camera* has a radiolucent region" (emphasis added) which is "disposed between or alongside said first image detector and said second image detector". Zeller teaches such a radiolucent region in the camera, wherein said camera (4) has a radiolucent region disposed alongside said first image detector (18) and said second image detector (18'), where x-rays enter said camera at said region (Column 2, Lines 55-60).

Therefore the prior art rejections of Claims 22, 26, 27, 29-30, and 35 as being anticipated by Zeller et al. are maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anastasia Midkiff whose telephone number is 571-272-5053. The examiner can normally be reached on M-F 7-4.

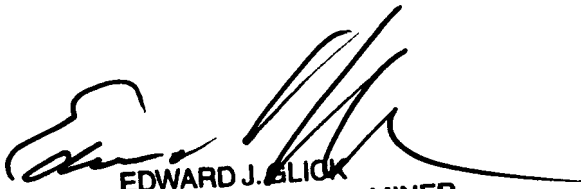
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ASM

5/28/07


EDWARD J. CLICK
SUPERVISORY PATENT EXAMINER